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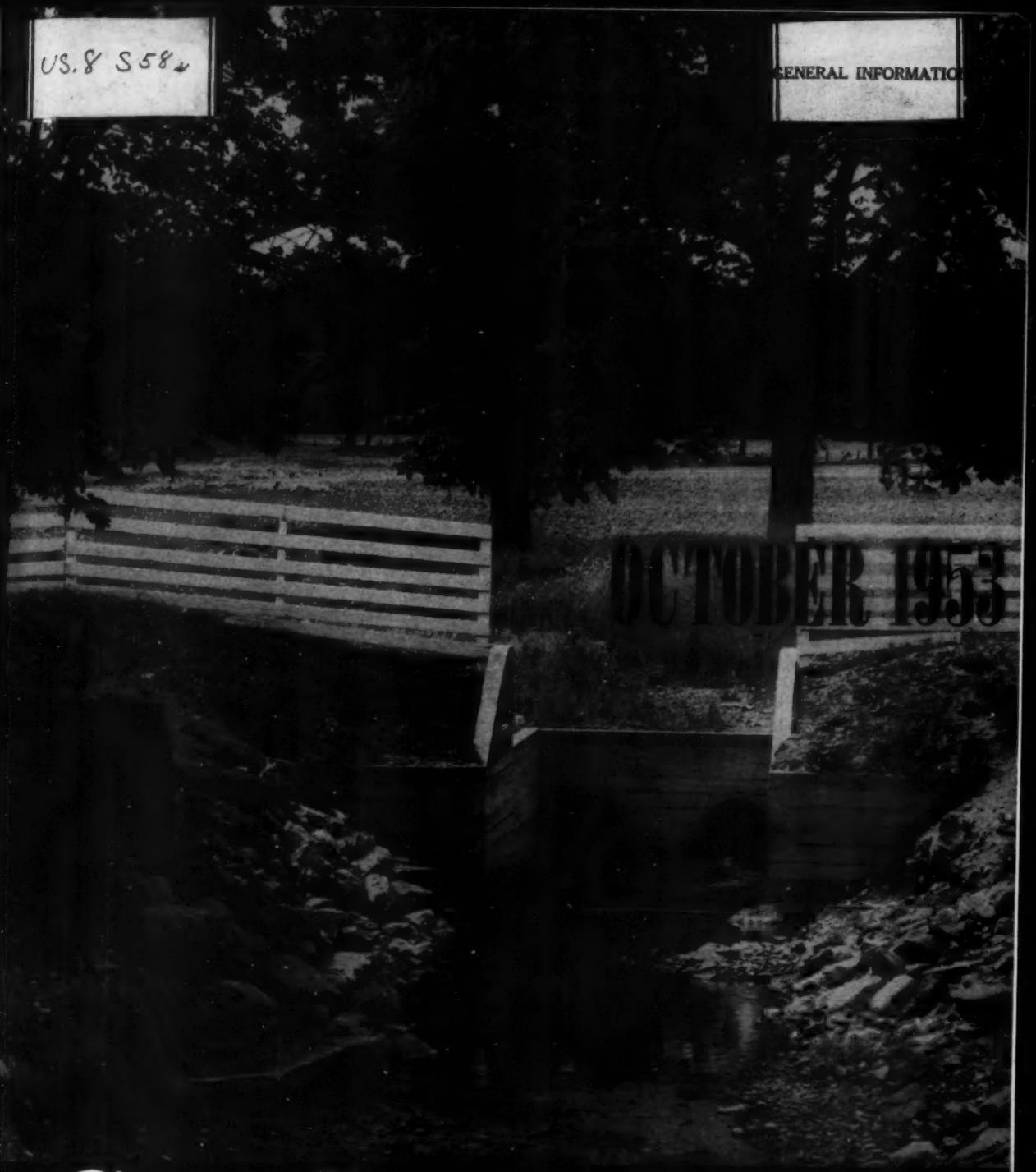

OCTOBER 1953

SOIL CONSERVATION

OFFICIAL ORGAN OF THE SOIL CONSERVATION SERVICE

SOIL CONSERVATION •

OCTOBER 1953
VOL. XIX—NO. 3

EZRA TAFT BENSON
SECRETARY OF AGRICULTURE

ROBERT M. SALTER
CHIEF, SOIL CONSERVATION SERVICE

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★ THIS MONTH ★

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WELLINGTON BRINK
Editor

SOIL CONSERVATION is published by direction of the Secretary of Agriculture as administrative information required for proper transaction of the public business, under approval (August 6, 1951) of the Director of the Budget. SOIL CONSERVATION supplies information for workers of the Department of Agriculture and others engaged in soil conservation.

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TREES INCLUDED IN DEED.—White pine trees, planted by the Avery County (N. C.) Soil Conservation District on land of an aged and infirm resident of the district, will be protected by future owners as well as the present owner, under an agreement drawn up between the district and the landowner and recorded as part of the deed.

The owner is an old-age pensioner and, under North Carolina law, the pension payments represent a lien against the property. At his death, the property would normally be deeded to the county and state governments, or be sold to the owner's heirs for the amount of the lien.

The agreement provides that the owner will to the best of his ability protect the pines from damage by fire and grazing and will allow only those trees to be cut or removed which are recommended for cutting by a qualified forester. Since the agreement is recorded in the deed, future owners also will be bound by it.

The FFA Chapter of Newland High School cooperated with the district by providing the labor to plant the 4,000 white pines, which were set out at 4x4 foot spacing as a demonstration on a steep eroded area facing N. C. Highway 194. To emphasize the demonstration, trees planted at closer spacing were used to spell out the words, "Save Soil," in 40-foot letters.

FRONT COVER.—This drainage outlet structure was built in 1951 on the V. D. Neal farm No. 7 in Miami County, Ohio. It is technically known as a box inlet straight-drop spillway. The drainage area is approximately 1,200 acres. Photographer: Hermann Postlethwaite.

All orders go to the Superintendent of Documents, Government Printing Office, Washington 25, D. C.

This Is What Makes a Winner!

The Chief of the Soil Conservation Service reports on the exceptional record of a Virginia work unit.

By ROBERT M. SALTER

Dr. Salter proudly presents a 1953 U. S. Department of Agriculture superior service award plaque. Receiving it on behalf of the work unit are L. B. Henretty and Richard L. Sanford.

SOIL conservation has to be good to be of the award-winning brand.

We had an opportunity to see just how good the soil and water conservation program is which caused north-central Virginia's Culpeper-Rappahannock Work Unit to be one of four selected from among some 2,900 Soil Conservation Service work units to receive the 1953 United States Department of Agriculture superior service award.

We saw outstanding examples of conservation on the land.

We observed conservation reflected unmistakably in the minds and hearts of those who own and operate that land in the Culpeper Soil Conservation District.

We heard the program evaluated in terms of enthusiastic praise by businessmen and other community leaders.

And we noted with particular satisfaction Service personnel giving credit where it properly belonged for the recognition that had come their way—to the district supervisors and others whose conservation leadership and accomplishments were responsible for it.

The occasion was the plaque-presentation dinner at Culpeper, participated in by conservation leaders from throughout the 5-county district. Actually, the day's eye-opening activities started in mid-morning, in the farm office of Culpeper County Supervisor T. G. Ragsdale at Brandy Station 5 miles out of town. Ragsdale, who is vice-chairman of the State Association of Soil Conservation District Supervisors, operates the 800-acre dairy and livestock "Beauregard Farm," owned by J. C. Miller, Jr. of Richmond.

Highlights of this successful conservation farm operation were chronicled in random notes jotted down while Ragsdale gave us preliminary briefing from his farm plan and afterward took us over the farm.

Some conservation work was done on the place in 1940 out of the Brandy Civilian Conservation Corps Camp, but Ragsdale dates the current program on the farm back some 10 years, under the Culpeper district operations.

Before that, the soil and water problems were serious. The land was farmed in square fields, and erosion was so bad that the highway crews had to use bulldozers to move the soil off the road along the lower side of the place after heavy rains. Some spots were so wet and poorly drained that sometimes they couldn't be worked in season, and production suffered accordingly. Old bluegrass pasture had low carrying capacity, to say nothing of old pineland and an old orchard that were not producing at all. Even some machinery operations were difficult; at times the tractor wheels would spin in hauling hay loads up out of sloping fields.

Owner Miller, it seems, was somewhat skeptical when they first talked about a conservation plan. As Ragsdale says, "This is a commercial farm and has to pay its way." But he studied the soil maps and gave the go-ahead, becoming enthusiastic about

Products of conservation farming: good food and smiles. Left to right, at buffet luncheon served at Beauregard Farm, operated by T. G. Ragsdale at Brandy Station, Va.: Mrs. J. A. Smart, wife of the area conservationist at Charlottesville; Mrs. Ragsdale, Dr. Salter and Mrs. Salter.

the conservation measures as they promptly began to show results. The 1,200-acre Miller family farm at Sperryville also has a conservation farm plan.

Although Ragsdale sees another 4 or 5 years' work still needed to carry out all the details of the plan as originally conceived, the casual visitor to Beauregard Farm certainly might be pardoned for concluding that about everything already has been done. For example, he sees some 300 acres of contour stripcropping in 4-year rotation of corn followed by small grain with clovers, alfalfa and grass seeded in it in the spring.

Most of the rest of the farm is in grass and legumes, including the once wet land. These block fields are used for hay, ensilage and pasture, depending on the season. Beef cattle are on pasture at least 8 months of the year, and dairy cattle on full- or part-time pasture 6 or 7 months. For example, orchardgrass, Ladino and alfalfa are grazed in late March and part of April—as high as 50 head of cattle and calves on 30 acres—and then the first cutting of hay is put in the silo.

After taking a hay cutting from grass-legume mixture seeded in grain in the spring, Ragsdale gets fall grazing. He showed us a field of oats, too, that was grazed by sheep last winter, and which stood to make a top yield. Small grains used to reestablish pastures as well as grasses and legumes, are grazed in October, November and December and in February and March. Grass and ladino normally are grazed from April 1 to December 15.

Ragsdale said they are thinking now of omitting corn almost entirely in favor of the small grain-grass rotation. His favorite pasture and hay mixture results from seeding 10 pounds of alfalfa (Oklahoma or Kansas common), 3 pounds of Kenland clover, ½ pound of ladino, and 10 pounds of orchardgrass. He already has got to the point of not having to use any nitrogen fertilizer in the

OTHER SUPERIOR SERVICE AWARDS

Tulia, Tex., Work Unit	1947
Broken Arrow, Okla., Work Unit	1949
Hamilton, Tex., Work Unit	1949
Perry, Okla., Work Unit	1950
Purcell, Okla., Work Unit	1950
Cimarron, N. Mex., Work Group	1951
Hinton, Okla., Work Unit	1951
Northern Utah Work Group	1951
Belmont, N. Y., Work Unit	1952
Pleasanton, Calif., Nursery Unit	1952
Shattuck, Okla., Work Unit	1952
Drainage and Earth Testing Laboratory, N. Mex.	1953
Idabel, Okla., Work Unit	1953
Little Rock, Ark., Work Unit	1953
Wills Point, Tex., Work Unit	1953

Giles H. Miller, president of the Culpeper National Bank, describes benefits to the community from soil conservation.

Vice Chairman L. W. Kipps (right) of the Culpeper Soil Conservation District explains to visitors his land use map. Garland Kidd, work unit conservationist, stands by to answer some of the technical questions.

T. G. Ragsdale (seated) briefs visitors on his farm operations. Looking on are Dr. Salter, Frank B. Harper, also of the Soil Conservation Service; and Russell J. Fisher, a supervisor of the Thomas Jefferson Soil Conservation District and Virginia director of the National Association of Soil Conservation Districts.

grain. He reported success on clover, using nearly a ton to the acre of about 32 percent rock phosphate. He is keeping the bluegrass pasture, also, but building up its carrying capacity through conservation management.

The Beauregard Farm visitor will see many other effective conservation practices in operation, including open-ditch drainage, clearing of the old pineland and orchard for grain production, pasture clipping with special lawnmower-type mower, contour fencing, permanent multiflora rose hedge fence in progressive plantings that he plans to build up to 4 or 5 miles. And the entire farm is part of the soil conservation district's nearly 6,000-acre Brandy Station Game Preserve, designed to build up the game supply. Ragsdale is especially partial to the multiflora rose, some of which already is 5 years old, as a means of increasing game birds and song birds which he contends beat poison for keeping down crop-damaging insects.

Most gratifying to me was Ragsdale's report on returns from this conservation farming. The farm is now carrying about 250 dairy cattle (100 to 125 milkers), 100 beef cattle including 50 registered Angus, 70 ewes, and 8 to 10 purebred Berkshire sows for Minnesota-hybrid boar breeding. These are some of the ways in which conservation has paid off on the Beauregard Farm—

Soil erosion "as nearly controlled as we probably can ever do it, with very little water leaving the farm."

Fifty to 100 percent more corn yield, pasture and hay crop yields doubled, an increase in small grain yields even more striking than those of corn.

Twice as much livestock as before the conservation plan was developed, and more milk being shipped than ever before.

Carrying capacity of bluegrass pasture increased 3 to 4 times, and so much forage being produced that "we've got to build more silos."

Savings in fuel costs and machinery upkeep that can be credited partly to contour stripping.

All improvements during the last 10 years paid for out of the increased yields and income.

And, finally, as Ragsdale sums it up, "In this system we are improving the land and making a good living!"

His statement was amply borne out at the bountiful buffet lunch Mrs. Ragsdale served, which included fried chicken, home-cured Virginia ham, vegetables from the contoured garden seen through the dining room window, and ice cream and cake topped with crushed strawberries. Ragsdale proudly called attention to the fact that nearly everything on the menu was produced on the farm.

Chairman W. M. Yager of the Culpeper district supervisors had a similar story to tell as he showed us over his 350-acre farm down below Culpeper in Orange County. He took us up on a sloping field and told us how all this land used to be in blocks, fenced with rail fences. It lost a lot of soil through erosion. Grassed waterways, we could see, were gullies so deep they couldn't be crossed with a tractor before Yager developed his conservation plan, starting 10 years ago. In fact, he said, he convinced himself of his need for conservation by going out onto those same fields in the rain and seeing what was happening. And there was too much bouncing when he tried to navigate farm machinery over those old washed-out corn rows.

The Orange County supervisor said his contour strips have taken care of the situation. When water goes off the fields now, no soil goes with it.

He uses orchardgrass, red clover, ladino, and alfalfa in his forage mixtures, in up to 6-year rotation with alfalfa, and also has bluegrass pasture which he likes.

Although this supervisor told us "I'm not done yet" with putting the plan in effect, he reported satisfying results. He has increased the size of his dairy herd and practically doubled the total number of livestock. Yet, he produces more grain and hay than he can use, whereas formerly he had to go out and buy grain. He farms his stripcropped fields with a smaller tractor than could be used under the old up-and-down-hill system, and there has been economy in machinery operation. He harvested enough timber from his 10-acre oak woodlot to provide lumber for a 60-cow dairy barn and his tenants were well supplied with wood.

"My conservation plan has increased production, and has definitely paid off in money," Supervisor Yager said. "And it has saved soil. You can't replace soil, though you might restore fertility. Of course, you can't do it all overnight; it takes time, but it's worth it."

A pause for lemonade and Mrs. Yager's homemade cookies under the big shade trees in the Yagers' front yard. Then on into Madison County,

A glimpse of the Beauregard Farm, where 300 acres are in a 4-year contour strip rotation. Here, its grasses and legumes alternate with barley.

through the 24,000-acre Beautiful Run watershed where 20 farmers are working toward conservation farming in an unbroken block, thence to the 400-acre main part of L. W. Kipps' farm of nearly 700 acres. Kipps is vice-chairman of the Culpeper supervisors, but he had a conservation plan back in 1938 before there was a district. He's proud of the brushland he's converted to clover and bluegrass for hay and pasture, and of the other land he has taken out of crops and put chiefly into grass and alfalfa. He said he thought more of that should be done.

Kipps is pleased that he has been able to treble his livestock numbers and still find himself with more feed than he can use up. He runs 175 head now, including 80 milk cows, 30 beef cows, steers and calves, and the rest young dairy animals.

He's happy too over the 3 miles or so of tile drainage that has made high-producing land out of formerly low-producing land, of his contour strip-cropping and conservation crop rotation, of his farm pond, and of his multiflora rose fence.

Kipps is proudest of all, though, of his neighbors' interest and accomplishments. He guided us to a ridge-top of recently-harvested alfalfa and pointed to contour-stripped fields and pastures in all directions.

"One of the main things I feel right proud to have had a little part in," he said earnestly, "is all the strips you can see around on the different farms. I was the first one in this area; they used me as a guinea pig to get something started before our district was started in 1939. The folks around me have come along and are doing a better job now than I'm doing!"

More lemonade and some of Mrs. Kipps' home-made cookies in their front yard, while Kipps explained details of his plan from maps displayed beneath a shade tree. Then on around through Madison Court House for a final stop, to see what conservation drainage improvement has done for the Robinson River bottom land holdings of R. S. Graves Brothers, Madison County landholders and businessmen.

We stopped for a close look at about 80 acres drained by 6-inch main tile and 4-inch laterals, but there is 600 acres of bottom which Graves explained all is in cultivation each year. He follows a rotation of corn, barley, oats and grass, and uses fertilizer on both grain and hay crops. He also uses cross strips, keeping about two-thirds of the bottom in crops "to stop and hold sediment coming from the land above."

"We don't aim for it to go any farther," Graves remarked. "We don't want it to get out of the county!"

This bottom land, he told us, had been going down for a hundred years and wasn't good for

(Continued on page 59)

How Feed the People?

Twelfth Institute on Conservation, Nutrition and Health looks for an answer to problem of world hunger

By GLENN K. RULE

STATESMEN may be wiser than they know when they say, "Let's get down to the grass roots of this matter." We were told in Chicago in July that the effect of grass roots on the soil is the most fantastic agricultural phenomenon in the world, that the atomic bomb is not so important to the human race as is humus, and that only through grass can we maintain and increase the humus in the soil.

Thus grass, in a word, supplied the accent to the Twelfth Annual Institute on Conservation, Nutrition and Health held at the medical center of the University of Illinois and traditionally sponsored by the Friends of the Land. Grass came into prominence at the institute through a challenging paper by Frederick Lyle Wynd, research professor of plant physiology at Michigan State College, who spoke on the subject, "The Contribution of Restoring and Maintaining Organic Matter in Soils."

This provocative paper precipitated some discussion and debate immediately after presentation but Professor Wynd's views were again challenged when Ollie Fink conducted the open forum in the closing hours of the session. This paper, and others, will appear in the early issues of the Land Magazine.

"We have great need," said President Jonathan Forman in his summarizing remarks, "to be continually informed about everything relating to soil and man. Our primary purpose has not been to assemble great crowds in these conferences. . . . We hope to retain the interest and contribution of a small, hard core of capable people who can and will help us to attain our objectives. As our population increases we are faced with the question, 'How are we going to feed the people?'"

How, indeed! This was the question that permeated the conference and in a sense it served as a measuring device to evaluate the contribution from each of the several speakers.

Dr. Robert Cook, editor, *Journal of Heredity*, reminded us that half of the human race is going to bed hungry every night and he insisted that despite our gains in technology there is still too much lag between fact-finding and application. To narrow this gap he suggested that we project our view into the future and far beyond the customary date of 1975. Prof. Robert L. Pendleton, of Johns Hopkins University, in his comments about tropical soils, held out little hope for any extensive future supply of food from these sources. Tropical agriculture in general, he said, is based on poor soil that won't justify the use of commercial fertilizers.

Wheeler McMillen, president of the National Chemurgic Council and editor of the *Farm Journal*, called for a vigorous effort to examine and appraise the use of non-edible portions of plants. Prof. H. H. Mitchell, of the University of Illinois, stressed the importance of high-quality protein in animal diets. Barry Commoner, plant physiologist, Washington University, St. Louis, discussed the role of plant proteins and plant viruses. Dr. L. M. Turk,

(Continued on page 64)

NOTE.—The author is executive officer to the Chief, Soil Conservation Service, Washington, D. C.

Study How to Do a Better Job

By GORDON WEBB

"WHAT makes a soil conservation district successful? What are our jobs as district commissioners? Our opportunities? What are our state and national associations doing for us? What do we expect of our associations? How finance them and our districts?"

Questions like these are being studied by the farmers who govern Mississippi's districts in a series of meetings being sponsored by the State Association of Soil Conservation District Commissioners.

The idea grew out of recommendations of the southeastern area and the Mississippi association education committees in 1952.

"Why are some district supervisors active, and others inactive?" Southeastern Vice President Sam A. Thompson, of Itta Bena, Miss., asked members of the area education committee at last year's meeting. "Is it because some supervisors understand their duties and responsibilities, and others do not?"

The discussion that followed led the committee to add supervisor-education to its list of suggested activities. "We need to inform ourselves before we can inform others about soil conservation districts," the committee said in effect.

C. K. Fisackerly and members of his committee proposed the Mississippi workshops, and his association endorsed the plan. The State's 74 Districts were divided into groups of 5 to 8 for a series of meetings to be led by officers and directors of the State association.

Association President L. F. Angelo and Thompson arranged with the State heads of agricultural agencies for their local representatives to attend. As workshops were scheduled, letters of invitation went out to both commissioners and agricultural workers.

"The agricultural personnel of your county —Soil Conservation Service technician, Extension county agent, PMA administrative officer, Farmers Home Administration supervisor, Forest Service representative, and the vocational agricultural teachers—have been informed by their superiors at the State level to attend with you where possible," said one typical letter to district commissioners from a State association officer. "These boys will not get travel for this meeting; so load them up in your car and bring them along."

After the first 8 meetings, district board members and agricultural workers had a much better understanding of the district program and its responsibilities.

Attending this initial series of meetings were 128 district commissioners, 123 agricultural workers, and 17 others. The "others" included bankers, businessmen, and farmers.

A kit of materials developed under Thompson's leadership was distributed to the workshops. It included NASCD leaflets, pamphlets, and decals; copies of the basic memorandum of understanding between a district and the USDA; supplemental memorandum between a district and SCS; sample memorandum between a district and a State Forest Service; Public 46 creating the SCS; and a printed copy of the State soil conservation district law. The district law was printed by the Newton County District.

Two true-false quizzes were used to open the meetings, and led to excellent roundtable discussions.

One consequence of the workshops was increased attendance of district board members at the State association's annual meeting in January.

(Continued on page 67)

NOTE.—The author is in the information division, Soil Conservation Service, Spartanburg, S. C.

Youth On Its Toes

By CLEM AULT

WE owe our American youth something for the praiseworthy way they're learning the ABC's of soil and water conservation.

The vigorous way the kids are digging into tough land problems and picking up the facts on our agricultural needs is truly one of the best signs of our age. Nearly every day you hear of some new good land use job the young folks are tackling. They're dead serious about guarding the rich soil and water heritage. It is clear to them that they have a big stake in their country's lands.

It isn't any one young people's group that is leading the way in soil conservation. Good land use is a pretty well recognized program among many organizations such as Boy Scouts, Camp Fire Girls, F. F. A. and 4-H Clubs. They all are learning how to conserve and develop the land by "doing."

It would be hard to find a more enthusiastic group of young conservationists than the Scouts of Troop 9, Medford, Oreg. They got their "know how" the hard way. No "parlor" farming for them!

First, they acquired grass roots information on soil and water problems, and what to do about them, from the new Soil Conservation Merit Badge pamphlet and from talks with SCS technicians. Then came the "doing." Under their scoutmaster, Dr. William H. Roberts, a dentist, and troop committeemen they helped stake out a rough field by marking the high and low spots for leveling. Then they turned out and assisted with the actual leveling job. The work was well done and the field is in shape to drain and irrigate properly.

NOTE.—The author is soil conservationist, Soil Conservation Service, Medford, Oreg.

Technician and Scouts get the feel of the good earth.

Next, the boys pitched in and helped seed a grass waterway in an old, meandering ditch channel. The scouts had a lot of fun operating the tractor and re-shaping the fields and the waterway which now carried runoff safely from the field.

Another "good turn" they performed for soil conservation—and all of us—was the planting of some 1,300 multiflora roses to provide food and shelter for wildlife.

They rounded out their conservation schooling on soils, pasture mixtures and erosion by touring the farming area north and west of Medford early this spring.

For a conservation job "well done," 7 scouts of Troop 9 were awarded the Soil and Water Conservation Merit Badge, a recent addition to Scouting's Merit Badge series.

It takes solid work to pass a merit badge on soil and water conservation. There's no easy way. Scouts must school themselves on good land use and apply their knowledge in the field. It's the "learn by doing" feature that has made it so much fun for scouts.

Sammy (Pee Wee) Jennings is a good example. He's helped level that 15-acre field. His mother, Mrs. Sam Jennings, says he got more out of the project than any he has undertaken in scouting.

Troop 9's experience is an indication of the way that Pacific Northwest youngsters are getting behind the Nation's land-improvement movement today.

DISTRICT LEADER ON "FUTURE" BOARD.—Otto H. Liebers, Nebraska dairy farmer, legislator, and conservation leader, has been elected to the board of directors of Resources for the Future, Inc., a non-profit corporation supported by the Ford Foundation for research and education in the conservation and development of the Nation's natural resources.

Liebers, a partner-owner of the Skyline Dairy and Farms, is co-chairman of the Salt-Wahoo Watershed Association and chairman of the Salt Creek Drainage Association. A graduate of the University of Nebraska College of Agriculture in 1913, he served as Nebraska's first county extension agent in Gage County.

For 8 years he has been a member of the executive committee of the American Guernsey Cattle Club and Golden Guernsey, Inc.

As its first project Resources for the Future is sponsoring the Mid-Century Conference on Resources for the Future, to be held in Washington next December 2 to 4.

WHAT MAKES A WINNER?

(Continued from page 55)

anything before the conservation program came along. "Cattle couldn't even walk over it." Now, he figures, it is "the best land in the county," producing 100 to 150 bushels of corn per acre, proportionate small-grain yields, and prime grazing after the crops are off.

We learned that Madison County now boasts more of this tile drainage improvement than any other county in the Piedmont of Virginia—better than 60 miles of tile drains, at 700 to 1,000 feet per acre.

"I figure," Graves said, "that the drainage paid for itself in the first crop of corn. With corn the price it is, I figure the drainage will pay for the tile the first year and for the land the next crop. More important, we are improving the land. I don't think any man should farm if he doesn't leave the land in better shape than when he started."

What the conservation farming we had been looking at during the day means to the community was summed up at the evening award-presentation dinner by Giles H. Miller, president of the Culpeper National Bank, American Bankers Association vice-president for Virginia, and former president of the Virginia Bankers Association.

"Of course, I think it has meant perhaps most to the individual farmer who has needed and received the conservation help," he told the guests, including farmers, business and professional people from the five counties in the Culpeper Soil Conservation District. "We in banks are in a position to see what has been accomplished. In addition to individual benefits, conservation has been a great help to the community. It has been a great help in lifting agricultural income of this whole district.

"Bankers will agree that it has been a big help financially. Conservation farmers in most cases have been able to obtain financial assistance needed. The farm plan is like an architect's plan, and we in banks have been requiring it more and more. This type of job needs the best cooperation that is available. Various agencies and individuals working together in this Culpeper Soil Conservation District have done this job, and I think this district has a great future."

(Continued on page 64)

Federated Clubwomen Look at Cons

Land-conscious officers and delegates spend two memorable days getting acquainted with mod managing soil and water in a two-state area celebrated for its farming.

By AIMEE SLYE

Left, top.—Members of conservation tour [name] of M[ary]wood" was started in the late 1600's add[ed] in the the Hakes in recent years, it is surround[ed] land [u]formal rose gardens are in back, a fish[-]ulated [f]is president of the Maryland Federation [G]arden C[lub]cons[er]n.

Left, bottom.—Robert Strubel, of the B[ure]ine Va

Immediately below.—Delegates pause at m[e]rial to Cemetery, [Fred]erick, M

Right, top.—Barn on famous face-lifted [Ga]her farm

Right, middle.—Multiflora rose hedge a[lo]tour gu[e]by Charle[s] Dodson.

Right, bottom.—Mrs. E. E. Byerrum (le[ft] conserva[tion]Federation of Women's Clubs, with two [o]conserv[ation]Strickland, of Georgia, and [Mrs.] Samuel [H.]

Conservation

inted to modern methods of its farming.

on tour me of Mr. and Mrs. Jesse Hakes. "Glen-00's add in the following century. Restored by urroundi land now under conservation practices; , a fis ated farm pond in front. Mrs. Hakes eration arden Clubs and its veteran chairman of cons n.

the Be ine Valley Association, was a speaker.

use at rial to Francis Scott Key, Mt. Olivet metery, erick, Md.

e-lifted her farm. (Photo by Charles O. Dodson.)

edge a ntour grain strip, Thrasher farm. (Photo Charle Dodson.)

um (le conservation chairman of the General h two conservation chairmen, Mrs. J. Marvin a, and Samuel Levy, of Louisiana.

CONSERVATION-MINDED members of the General Federation of Women's Clubs wound up their 1952 national convention in Washington, D. C., with a bus tour of nearby Maryland and Pennsylvania. Led by their conservation chairman, Mrs. Florence Byerrum, 37 delegates from 15 states spent Memorial Day weekend viewing conservation practices under the guidance of technicians from the Soil Conservation Service. Extension Service and Forest Service cooperated. Prominent clubwomen attending included three state presidents, two state conservation chairmen, and the Federation's chairmen of water and soil, health and welfare, and child welfare. The group also included six members of the Florence Byerrum Conservation Club—a club formed to promote the cause of conservation in Illinois.

The tour covered the area from Washington to York, Pa., returning to Washington by way of Westminster, Md. As the bus and several cars traveled through the countryside they made stops at many places of historical interest. Among them were Mt. Olivet Cemetery in Frederick, Md., and at the National Cemetery at Gettysburg, Pa. At each officials greeted the group and gave a short historical talk.

At the Lawson King and Sons farm in Montgomery, Md., the group was joined by Fred Bull, Maryland's extension conservationist, and his party of technicians. This 1,100-acre farm, in the heart of the Montgomery County Soil Conservation District, is the home of one of the largest Holstein herds in the country—654 head. Fred Bull discussed grass plantings in the county and their value to the dairy farmers of the Baltimore-Washington milkshed. He stated that there were 12,000 farms cooperating with districts in Maryland and that stripcropping was the most important conservation measure in Maryland. The lush, green fields on the King farm were a beautiful example.

At the Thrasher Farm, Frederick, Md., Ray Kincaid, soil conservationist, Md., told the women how on August 18, 1948 the farm had been rebuilt. He recalled that some 50,000 people attended the event and that the only casualty was suffered by a gentleman who became so interested watching a blimp that was taking pictures overhead that he bit down on his sandwich and swallowed a bee.

Of particular fascination to the group were a "sky" pond and a beautiful multiflora rose hedge, planted that day, which is now about 5 feet tall. Kincaid explained that a sky pond is a farm pond which depends entirely on water from the sky. An apt name, the women were quick to see, the still water reflecting the blue of the heavens. The group was told that if a pond is properly fertilized it will not have algae and, also, the fish will keep mosquitoes under control. Kincaid warned the group against bringing fish home and throwing them in the pond as it upsets the balance. Mrs. Thrasher said that the farm is now paying its way and that she was able this year to make further improvements on her home.

Through York County, Pa., the tour was conducted by SCS work unit conservationist Melvin Blish. Conservation practices here included stripcropping, diversion terraces, tile drains, open ditches, farm ponds, reforestation, acres of long term hay, miles of outlets and sod waterways. A light rain which fell during much of the time made it very easy to see what was happening on the land. A delegate from Texas was particularly

The bus tourists stopped at Gettysburg National Cemetery. Here they were joined by Frank Brower, area conservationist; Mrs. Charles Orem, president of Gettysburg Woman's Club; Mrs. Frederic Greist, president of Women's Auxiliary of the Horticultural Association of Pennsylvania, and Mrs. Eva M. Pape, businesswoman of Chambersburg, Pa.

NOTE.—The author is with SOIL CONSERVATION Magazine, Soil Conservation Service, Washington, D. C.

Ray Kincaid, soil conservationist, and Fred Bull, extension soil conservationists, at sound-amplifier car telling story of Thrasher farm. In foreground are state and national officers of GFWC: Left to right—Mrs. Samuel Levy, chairman of Federation's department of welfare; Mrs. B. V. Todd, president, Louisiana Federation of Women's Clubs; Mrs. Marion T. Weatherford, president, Oregon Federation of Women's Clubs; Mrs. H. J. Hull, president, Idaho Federation of Women's Clubs; Mrs. E. E. Byerrum, Federation chairman of conservation; Mrs. I. R. Morrison, chairman of Federation's water and soil division. Mrs. Thrasher is behind Mrs. Todd.

(All photographs with this article are by Hermann Postlethwaite, except as noted.)

impressed and would listen to no apology for the rain, "allowing" that it looked mighty good to her.

After dinner at York, the women met with conservation officials of the area. A slide lecture depicting the work of the Brandywine Valley Association in conservation was given by Robert G. Struble, agronomist with the association. Frank R. Brower, Jr., area conservationist, SCS, suggested that clubwomen have a fine opportunity to encourage the formation of such conservation groups throughout the nation. Mrs. Byerrum expressed the appreciation of the clubwomen for the courtesies shown on the tour and stated she was sure they were receiving inspiration from the trip to go back and be of greater service in their communities.

The women, most of them from cities, were impressed with what they saw in the Hanover, Pa., watershed. This tract, consisting of 1,514 acres, is owned by the Hanover Municipal Water Works. White, scotch and red pine have been planted on 1,257 acres and the balance is in a reforestation program. There are only two private farms in this area and through the drizzle it was plain to see that soil was washing from these into the reservoirs, while on the forested portion no silting occurred. The delegate from Chicago remarked that it was this particular problem, silting of her city's reservoirs and harbors, that had won her to conservation. She has come to feel that city women have a vital interest in what is happening on the land, if only from a taxpayer's point of view, for the cost of dredging harbors and clearing reservoirs of silt comes amazingly high.

Back in Maryland, the second day, the tour was joined by Grover Zimmerman, work unit conservationist, and Solomon Hoke, district supervisor of the Carroll Soil Conservation District since 1938. Hoke pointed out the highest place in the county, 1,228 feet, where 5 watersheds start. He told the group that neighbors wondered about his

sobriety when he first started plowing on the contour. Now, with 812 farms cooperating with the district, he is considered a pretty steady fellow. The many conservation practices being followed in this area attested to the value of the district program.

The tour's last stop had been planned as a surprise by Bert Robinson of the Soil Conservation Service—a very canny move, as all women love a surprise. He had arranged with Mr. and Mrs. Jesse Hakes of Glenwood, Md., for a visit to their estate. The Hakes arranged a reception and tea for the group, hospitably inviting them to go through the house and grounds. The house, built in the late 17th century, is a fine example of Siamese (twin house) architecture. It has been restored to use by the Hakes in the last 7 years and holds heirlooms of both families from the days of the early settlers. The farm has been put into production, has a farm plan which includes a pleasant farm pond at the front of the estate. At the rear of the estate, formal rose gardens are a continuing delight. This mingling of older parts of our heritage with the newer, modern ideas of conservation seemed fitting and proper. Conserve the old and use the new, is a theme which would have met the approval of our early settlers.

WHAT MAKES A WINNER?

(Continued from page 59)

The farms we visited are not, of course, the only ones in the Culpeper district having outstanding soil and water conservation work to show. They are only representative of what farmers throughout the district are doing. Nor is the Culpeper district the only one—award winner or otherwise—with such effective conservation on display. It likewise is only representative of what soil conservation districts throughout the country are accomplishing.

Such an award as that given the Culpeper-Rappahannock Work Unit is gratifying and naturally is much to be desired. The award, however, is incidental. The real reward is the conservation on the land and the devotion of the district farmers and their neighbors in town to good stewardship of their lands. The best goal is for the soil conservation district and work unit programs over the country to be so equally outstanding that the only way to determine the award winners will be to draw numbers for them.

HOW FEED THE PEOPLE?

(Continued from page 56)

of Michigan State College, discussed the role of mineral nutrients in the soil and Lewis B. Howard, of the University of Illinois, appraised the contributions that food technology can make toward the improved nutrition of man. Dr. E. R. Sears, Bureau of Plant Industry, outlined the contributions which scientific plant breeders may be expected to make toward the full production of food, clothing and shelter. Prof. H. B. Howell, of the University of Iowa, spoke on the economic aspects of soil conservation and Dr. Richard E. Myers, of the Pennsylvania Water and Power Co., outlined the contribution that a geologist can make in conserving natural resources. The Reverend Father Leo R. Ward, of Notre Dame University, discussed conservation from the standpoint of a philosopher.

This is the second year that the conference has been the guest of the Medical Center of the University of Illinois. The welcoming address was given by Dr. Roger A. Harvey, who outlined the role of radio-active isotopes in medical practice and showed through illustrative slides how isotopes are being used in industry for a wide variety of purposes.

At the evening session, Louis Bromfield, farmer and noted author, gave an enlightening and entertaining talk on the future of American agriculture. Joining him on the program was Lloyd B. Jensen, chief bacteriologist of Swift & Co., who discussed nutrition and its role in biological and social evolution.

The concluding full-length paper was given by Dr. John Detwiler, Canadian co-sponsor of Friends of the Land from the University of Western Ontario, who outlined the possibility for total food and fibre production of all lands in full production.

BETTER DRINKING WATER.—Drainage in the Satilla River (Ga.) Soil Conservation District around Waycross has been bringing farmers a lot of agricultural benefits. J. T. Peacock, who lives in the flatwoods near Dubus Bay, claims it also has improved drinking water.

Dubus Bay is a 200-acre swampy depression with no natural outlet. The Satilla River District supervisors requested SCS engineers to make a survey, and the latter designed a 4-mile canal from Dubus Bay into Okefenokee Swamp. Ware County and the City of Waycross assisted at its digging.

"Now our water tastes as good as any water does," Peacock avers.

Gully Stoppers

By LES VOLMERT and JOHN KRIZ

FARMERS in the Lafayette County (Mo.) Soil Conservation District have found tube and riser erosion-control structures valuable as terrace outlets and gully stabilizers. So much so, that the 65 they built last year brought the total in the district to 124.

Lafayette county lies on the west side of Missouri just south of the Missouri River. It is an area of rich agricultural development. The northern part of the county is predominantly in Marshall and Knox loess soils.

It is in this area of steep, hilly land with easily eroded soil, and in the deer lick areas of the southern part of the county, that huge gashes 15 to 40 feet deep are rapidly developing. Depth alone does not cause all the trouble. The gullies tend to branch out into the fields and gradually a 40-acre field shrinks to 30.

But the number of gullies is quickly diminshing on the farms of district cooperators. After the formation of the soil district in 1948 work started almost immediately on the first of the high-quality, reenforced concrete tube and riser structures.

Spears Stewart of Lexington was the first farmer in the district to complete such a structure.

Albert Lichte, of Lexington, has built the most. He is a pioneer in soil conservation in this county and he built his first structure in 1927. This was a square box of wood in a big gully, and an earth-fill thrown in by horses. It didn't last long. Next Lichte tried a square concrete box culvert with a riser and no seep collars. This didn't endure much longer than its wooden forerunner.

Note.—The authors are work unit conservationists, Soil Conservation Service, Higginsville, Mo.

Albert Lichte, Lexington, at cattle-guard and swirlboard protecting the riser on this 24-inch drop-inlet structure. This was once a 15-foot gash with side canyons eating its way into the fertile hills.

Drop-inlet structure before fill is applied. It stabilizes a 17-foot gully and two terrace outlets, and serves as a crossing to farmstead. It also supplies water for livestock, and will make a wildlife area.

In the meantime Lichte had been busily terracing his 375 acres. Soon after the district came in, he started work on his first successful drop-inlet structure. Today, he has 5 structures stabilizing waterways which are paved with reed canary grass carrying water from 340 terraced acres. Lichte had finally found the right answer to stabilizing his terrace outlets and gullies.

How did the Lafayette farmers build those 65 structures in 1952? The major impetus came from the supervisors Jim Schooling, Spears Stewart, W. L. Gruber, and Milton Uphaus, who aided the program materially when they arranged to have riser and seep collar forms built for renting at nominal charge. That was 2 years ago. These forms are now paid for and are serving as a source of revenue for the district.

PMA payments also were a big incentive for moving the work along. The average structure was about 68 feet long and of re-enforced concrete or metal pipe; it was from 12 to 42 inches in diameter. Ready-mixed concrete averaged 8 to 12 cubic yards; dirt-fill, 2,000 cubic yards. It took some 12 man-days for installation.

The enthusiasm of neighbors, working together, resulted in highly trained crews who needed little supervision. Several local contractors have become proficient in the work and require from SCS technicians only assistance on design together with minor supervision.

Siskiyou's Busy Bill Mathews

Mathews, with his son Douglas and Ken Creoni, technician, checks over a land-capability map.

By HERB BODDY

WILLIAM MATHEWS, JR., a native son of Etna, Calif., has been making "good land use" talks all over Siskiyou County for 3 years now. Between times, he goes to his Farm Bureau gatherings, works as secretary and a director of the Siskiyou Soil Conservation District and runs 3 full-fledged farms.

Bill Mathews is a land evangelist in this era of high-speed farming. He goes out of his way to tell people about what good land use did for him, and will do for them. He hopes to tell his story to a lot more of the county's farmers in the days ahead. It's easy to talk about good land use, he says, when it has paid off so handsomely on your own farm. He's one of hundreds of volunteer leaders, the country over, who are making the soil conservation movement go.

This Scott Valley conservationist began taking a closer look at better farming methods about the time he became a director of the Siskiyou Soil Conservation District in 1948.

He was a good average farmer before that. Yields of alfalfa hay, high quality seed and livestock weren't tops, nor were they really bad. He always was a careful farmer who tried to make the most of what he had.

But the more he mulled over the so-so output of his farms, the more sure he was that there were better and more profitable ways of farming. When Scott Valley and other Siskiyou county farmers wanted a soil conservation district to help them get

NOTE.—The author is in the information division, Soil Conservation Service, Portland, Oreg.

needed technical aid on land problems, Mathews was one of the leaders in the drive to get it voted in. And he was one of the first to swing into conservation work after the new district was set up.

From Ken Croeni, of the Soil Conservation Service, he got help in working out farm conservation plans for his three farms.

One of his first moves was to tackle sheet erosion on his sloping dryland. He used conservation plantings and tillage methods—something new to Scott Valley.

He cultivated after the grain harvest in the fall of 1951, and let the stubble and straw lie on the ground through winter. In spring, he disked twice, springtoothed and then cultipacked to get a firm seedbed. He planted intermediate wheatgrass and alfalfa, and crested wheat and alfalfa in alternate rows to conserve soil and improve fertility.

The stubble and straw protected his land from erosion and helped water to soak into the soil during one of the wettest periods in years. The crested wheatgrass drilled with alfalfa provides better pasture for beef cattle.

Mathews found that cross-slope tillage and a good rotation system helped to control erosion on sloping dryland fields. On the home place, he seeded 20 acres of fast-growing slender wheatgrass with sweetclover in alternate rows to increase and improve livestock forage.

Next he worked to get higher crop yields from 40 acres of sub-irrigated pasture. In 1950, he seeded 15 acres of this pasture to a mixture of alta fescue, orchardgrass, alsike clover and birdsfoot trefoil. From it came a high-quality hay yield the next year. Then he turned stock onto it.

Last year, Mathews grazed the field three times in rotation. The rest of the 40 acres of sub-irrigated land was seeded to the same mixture plus some brome and will be managed like his other conservation seedings.

He plans to manage his woodland tract of pine and fir on a selective basis and already has some of the trees marked for cutting. The California State Division of Forestry and the Soil Conservation Service are helping him manage and conserve his timber.

Mathews also is alert to wildlife values. He planted 1,500 snowberry and other plants to furnish cover for quail and pheasants.

As his next big conservation job, Mathews plans to drain 100 acres of wet leased land and some 20 acres on the home ranch.

Standing out in his conservation operations is the fact that he puts as much good conservation on his two leased farms as on his own acreage.

HOW DO BETTER JOB?

(Continued from page 57)

The idea is spreading. The program committee of the National Association of Soil Conservation Districts has recommended workshop or training meetings to be held under the sponsorship of the State associations to help develop leadership abilities in supervisors, commissioners, and directors. Said the group's report:

"The committee recognizes that many district board members are inactive because of lack of interest, lack of understanding, lack of incentive, or a combination of all three. This committee believes that, before we label these inactive board members as 'dead wood,' the State and national associations should give them an opportunity for training in their duties, responsibilities, and opportunities; and should give them assignments in inter-district work, and in State and area meetings and activities."

BEES, SOIL AND FLAPJACKS.—The Northwestern Worcester County Soil Conservation District has rescued Frank Varnot, Barre, Mass., and his bees, and provided Varnot with an "insurance policy" on the honey top-dressing for his much-liked flapjacks.

Frank keeps bees as a hobby, and to pollinate his vegetable garden and orchard. In dry August, last year, nectar in native wildflowers was down to the vanishing point. To fight off starvation, Varnot's bees ate the honey they had stored in June and July for their winter food supply and for Varnot's flapjacks.

Varnot asked the district to help him develop a season-long bee pasturage. SCS technicians took a census of bee-favored native plants, scheduled the order of blossoming, and applied their "use each acre according to its capabilities, and treat each acre according to its needs" formula. They found some soil unsuited for any other use except growing nectar-producing shrubs like tartarian honeysuckle, multiflora rose, and lespedeza. Varnot planted these shrubs to supply his bees' needs when native plants were not available.

In 2 years the shrubs will be blooming and Varnot's bees will have all the food they can eat throughout the year. The growth also will provide cover for wildlife. Best of all, Varnot expects always to have all the honey he wants for his hot flapjacks.

Seven Farmers Tame a River

Someday, they say, there will be pastures again where there is now a wide and barren channel.

Scott River flows by the Courtney B. Camblin farm. It formerly cut deep into pasture and cropland but now is being controlled by riprapping. Denuded hills seen here have greatly contributed to heavy runoff and erosion.

By HERB BODDY

RIVERS can be a big help to farmers. They can also cause trouble. They can crest and drop, and then cut and scour deep into high-yielding cropland.

For 20 years or more, river erosion was a most serious matter to 7 landowners along a 5-mile stretch of Scott River, a meandering stream in Scott Valley, Siskiyou County, Calif.

These farmers—Harry Tozier, Frank Lathrop, Walter Brown, Courtney B. Camblin, Mrs. Manuel A. Johnson, Clinton Custer and Ralph Simpson—by the winter of 1950 had lost to the stream some 250 acres of their grain and pasture land. A thousand more acres were in imminent danger. Once 75 feet across, the channel had widened in places to 750 feet. Things were in a sorry-looking state where the river had been.

NOTE.—The author is in the information division, Soil Conservation Service, Portland, Oreg.

Why was Scott River eroding? Surveys by SCS technicians blamed the clearing away of protective trees and brush to allow cropland to be farmed right up to the edge of banks. Vegetation is, of course, Nature's way of sealing such banks against depredation.

Oyster shell scale killed off the remaining cover such as willow and cottonwood trees.

Scott Valley farmers also point to timber-cutting operations which have stripped off the cover from steeply-sloping watershed areas surrounding the valley. Runoff pours down now, as a result. Some say, too, that placer mining of the river and its tributaries had something to do with the high soil damage. Another thing that has helped pave the way for erosion on the steep range lands is replacement of the deep-rooted bunchgrass cover by weeds, broncograss and brush.

But whatever the reasons, all agree there have been a lot of changes in the channel's course that brook no good for farmers. Very likely there was

some erosion going on a hundred years ago when Colonel Roger Jones commanded Companies A and B, U. S. Dragoons, garrisoned at Fort Jones, not far away.

A century of farming has brought a lot of changes to the Valley's soil resources. Instead of a few tons of soil slipping away, damage has been measured in acre lots.

But you can't throttle a rampaging stream by epithets. You have to work. Harry Tozier, a director of the Siskiyou Soil Conservation District, and his sons, came to this conclusion in the fall of 1950 when they discussed this problem with some of the other landowners.

Farmers not only talked about their soil losses but also offered ideas for harnessing the channel. Technicians were on hand to answer questions and help landowners set up a workable plan. Tozier explained that each farmer was free to tackle the job his own way. Each could do as much or as little conservation work as he pleased.

For a tough streambank control job like the one needed along Scott River, the technicians recommended rip-rapping. This calls for shoring up the sides with rock, pine and oak timber. It's a plan that has worked on many other far-western streams. In fact, rip-rapping was put to good use by one of Scott Valley's own residents, the late Fred P. Browne, some years ago.

When farmers got around to costs, the Production and Marketing Administration, offered to take over half the expense of work done by individual farmers.

Tozier and Simpson were two of the first farmers to use rip-rap. Others liked the job so well, they got Tozier to shore up their banks the same way.

Using a bulldozer, Tozier lined the banks with layer upon layer of pine and oak trees, cut from nearby hills. The trees provided a solid buffer for grain and pastureland against high water and flood stage flows. Plantings of native and golden willow, snowberry and matrimony vine were made along the old banks, to hold the soil and keep the rip-rapping secure.

The farmers' rip-rapping work got its big test during the heavy prolonged runoff period of the fall of '51 and spring of '52. Soil all along the protected section held fast.

Today Tozier says his rip-rapped farmland is in better condition than it has ever been before. The work has slowed the river down, thus easing its cutting force. Sandbars are forming in the channel. And instead of taking soil away, the river is piling silt by the ton against banks. Under soil conservation the river is gradually restoring the 250 acres of lost soil. Farmers say that the present stream channel will grow a lot of good pasture someday—just as it used to do.

THOUSANDS OF ACRES BENEFITED.—Supervisors of the Lower Neuse Soil Conservation District point to the construction of a 3½ mile drainage canal serving 30 farms in Pamlico County, N. C., as evidence of good team work by farmers.

M. E Ireland and Willie Paul took over the job of collecting assessments and paying bills, while SCS men contributed the final survey, staking and supervision of construction.

Completion of the work has brought some 4,000 acres of the best land in Pamlico County back into full production.

This is only one of a number of such jobs undertaken by more than 30 groups in the district, benefiting more than 11,000 acres at an estimated cost of $117,000. More than 400,000 yards of excavation was involved on a total of 53 miles of drainage canals, all of it in accord with the principles of using land according to its capabilities and treating it according to its needs.

FILMS CONVINCED.—Motion pictures were a factor in a soil conservation district referendum in Cooke County, Tenn.

When hearings were held last fall, County Agent Hugh Russell made intensive educational use of two films—"In Common Cause" and "The People Together."

Following a successful hearing, County Agent Russell planned an intensive pre-referendum educational campaign during the spring with motion pictures as the main device. For this effort, every motion picture projector available was put to work showing such films as "The South Grows Green," "Permanent Agriculture," "The People Together," "This Is Our Land," "In Common Cause," "Save That Soil," and "Neighbor's of the Land."

During a 2 weeks' period preceding the referendum. County Agent Russell asked for and received the cooperation of representatives of several agencies and groups. Joining him in showing the films were the Vo-Ag teacher, the assistant county agent, the home demonstration agent, the Pet Milk field men, and others.

The following month, landowners from every part of the county poured into the polling places to cast their ballots. A total of 691 voted for the district and only 2 against. At Del Rio, mountain community where the famous singer, Grace Moore, was born, 150 farmers voted for the district and not one opposed it.

WOODLOT CONFERENCE.—Public and private foresters and others concerned with management of America's more than 261 million acres in small farm-size woodlands met in Chicago in June for a brand new look at what they agreed is "America's number one forestry problem."

The meeting, called by American Forest Products Industries, was a working conference where public, industrial and consulting foresters from every part of the nation exchanged ideas and experiences.

"The changing economic status of forestry in the United States has brought great opportunity to the doorsteps of millions of little landowners," Col. William B. Greeley declared in opening the Chicago session. "Our little forests, averaging 62 acres each, make up 57 percent of the commercial forest land in the United States and 75 percent of all our private commercial forest land. They contain the most accessible and potentially the most productive 57 percent of our total wood resource."

EVEN THE DOGS KNOW.—W. E. Downing, farmer of near Raymond, Miss., finds that even his dogs have learned to look for birds in strips of bicolor lespedeza and don't waste time and energy elsewhere.

Downing started planting strips of bicolor in 1947 to provide food and shelter for birds as a part of his farm plan with the Hinds County Soil Conservation District. He now has 20 such strips on higher spots where no danger of high water exists. Each is 4 rows wide and 400 feet long. They provide food and cover adjacent to some 2,500 acres of good hunting land where the birds can range. He supplements this program by planting milo maize around the border of his corn fields.

"Follow my hunting dogs and you'll see every bicolor lespedeza strip I have," says Downing. "They know that these strips are the best places for quail."

FARM "BLUEPRINTS" VALUED.—L. M. Jones, of Warren County. Miss., returned to the farm in 1951 after several years as a building contractor. He says he would have been lost without the "plans and blueprints" developed for his farming operations with the help of the Warren County Soil Conservation District.

Classifying each acre of land according to capability has provided him with different kinds of materials with which he can build a more productive farm. Plants fitted to these materials will give him a grazing program needed to support 47 head of dairy catle.

BICOLOR ATTRACTS QUAIL.—P. C. McClary, Jr., of Friendfield Plantation in Georgetown County, S. C., in 1946 planted one-eighth-acre patches of bicolor lespedeza on well-drained areas in the woods and along the edges of fields. He now has 235 patches scattered over 2,500 acres.

During the past three seasons, McClary reports counts of 67, 64, and 85 covies of quail. He estimates that during the past season 250 or more birds were shot on the property.

"We examined the craws of the birds killed and only one last year did not contain bicolor seed," McClary says.

RECORD-BREAKING RESPONSE.—"At the close of the first 2 weeks of the contest period for our National Soil Conservation Awards Program, we had received over 600 enrollment post cards from soil conservation districts all over the country," according to Art Morrill, director of the program for the Goodyear Tire and Rubber Company. Only Connecticut and Nevada remain to be heard from.

AWARD WINNER DIES.—Leo R. Arnold, 65, veteran Michigan county agricultural agent known for his work in soil conservation, died on July 8, only 8 days after his retirement. Arnold, along with R. E. Briola, district conservationist, received a joint U. S. D. A. superior service award for their cooperative work in soil conservation in 1950. Their chief effort was the restoration to production of windswept, sandy soil along Lake Michigan in Ottawa County.

This small dam on the Zumbro River near Wanamingo, Minn., isn't what it used to be.

SILT THE DESTROYER.—This dam at Wanamingo, Minn., in the Zumbro River washed out last spring. It was constructed in 1936 and in a period of 10 years completely silted full. At one time shortly after construction was completed this was a recreation spot with a fine bathing beach and good fishing.

Technicians predicted that it would be silted full in 10 years and were locally ridiculed. However, in the 10 years it actually was full except for a narrow channel along one side.

The 9-inch rain of July 26, 1951 started the washing out of the fill on the north side of the dam, and the spring rains in the spring of 1952 left the dam in the condition seen here.

You can see the silt which filled the reservoir in the background with the new channel that the river is washing through it. The dam itself is to the left, the whitest area being the spillway.

Army Record as a Farmer

THAT it pays to practice conservation is again brought out in the Agricultural Lease Program 1953 Summary, recently published by the Chicago District, Real Estate Division, Corps of Engineers, U. S. Army.

The objectives of the Army's leasing program are designed to—

1. Provide that government-owned land be farmed according to accepted practices to improve fertility and prevent soil erosion.
2. Reduce government land maintenance costs.
3. Make farmland resources available for productive operation, thus contributing to the nation's food supply.
4. Obtain fair rental returns for the proper use of government land.

To carry out these objectives 5-year crop plans are developed for all land available for lease in the Chicago District. Such crop plans are designed to be consistent with the needs of the soil and in line with the basic objectives of the program. U. S. soil survey data, sample soil tests, research data available through the extension agents, the Soil Conservation Service, and the Army's land management plans, are all utilized in the preparation of farm plans which are made a part of the lease specifications on all land offered for lease.

Benefits to the Government resulting from this procedure for leasing Army lands to private operators totaled $784,318.86 during 1953. This revenue was obtained from 66,123 acres of land on 12 Army and Air Force installations and 2 Civil Works Flood Control projects under the administration of the Chicago District.

Of the total government benefits, $353,466.81 came from cash rentals, and $158,764.22 came from soil treatments, which increase productivity and land values, but which are paid for by the operators of the land. The balance of the benefits realized by the Government from this program represent a saving in maintenance which would have been a necessary government expense if the land were not under lease, and operated according to a sound conservation farm plan. It is significant to note that the savings in maintenance costs showed an increase over last year in spite of a smaller number of tracts under lease and a consequently smaller total benefit to the Government. This indicates the enduring character of the conservation practices being followed and the cumulative benefits that follow over the years when land is used in accordance with its capabilities and treated in accordance with its needs.

A. M. HEDGE

WIDE VARIETY ASSISTED.—Bill Warren, SCS farm planner at West Springfield, Mass., has made a study of the records of 338 land-owners assisted by the Hampden Soil Conservation District. Of the total, 139 farmed part-time, and 199 were full-time farmers. There were 149 farms with more than 100 acres, 86 with 51 to 100 acres, 87 with 11 to 50 acres, and 16 with 3 to 10 acres. There were 179 dairy, 14 fruit, 21 poultry, 28 tobacco, 44 truck, 15 beef, and 71 miscellaneous enterprises. Some towns had taken more advantage of district services than others. There were 38 cooperators in Agawam, 6 in Southwick, 41 in Westfield, 42 in Monson, 15 in Ludlow, 13 in Hampden and 4 in Montgomery.

DISTRICT PLANS NURSERY.—Supervisors of Florida's Nassau Soil Conservation District have made arrangements with the county school board for the use of 50 acres of land in the county fair grounds as a nursery. The land will be used to improve and increase grasses, legumes, and shrubs useful in soil and water conservation.

SAVES $150 A DAY.—Glenn S. Datson, dairyman and supervisor of the Orange (Fla.) Soil Conservation District, installed an irrigation-drainage system in line with better pasture management and cut his feed bill about $150 a day.

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After four years of conservation farming, this is how the Nellie Thrasher farm appeared October 15, 1952, when Hermann Postlethwaite made this photograph. Situated a mile from Jefferson, Md., it was the scene of a widely publicized Maryland Conservation Field Day in August 1948, when it was the subject of a spectacular face-lifting. This is one of the farms visited during the bus tour of members of the General Federation of Women's Clubs, described in the article by Aimee Slye in this issue.